

Streptococcal pharyngotonsillitis: need of microbiological tests in order to have a precise diagnosis

Faringotonsillite estreptocócica: necessidade do uso de testes microbiológicos para diagnóstico preciso

Maria Isabel de Moraes-Pinto

Acute pharyngotonsillitis is a common infection in the pediatric population that can be easily recognized by medical history taking and physical examination. Additionally, it has often a viral etiology and is caused by group A beta-hemolytic streptococcus (GABHS) only in 20 to 30% of cases occurring in children^(1,2).

Due to the low sensitivity and specificity of clinical evaluation for the etiologic diagnosis of GABHS infection, several medical institutions, such as the Brazilian Society of Pediatrics and the American Academy of Pediatrics, currently recommend that the diagnosis of pharyngotonsillitis in patients with clinico-epidemiological suspicion of GABHS infection should be confirmed by microbiological techniques^(3,4).

This need is clearly demonstrated in a prospective study published in this issue of *Revista Paulista de Pediatria* by Cardoso *et al*⁽⁵⁾. In their evaluation of 650 children and adolescents, the authors show that the etiological diagnosis of GABHS pharyngotonsillitis has low sensitivity and specificity if based solely on clinical data, differently from what happens with the diagnosis performed by rapid test for the investigation of GABHS in oropharyngeal secretion⁽⁵⁾.

Cardoso *et al* (2012) demonstrated that also in our setting, and similarly to another study conducted in Brazil⁽⁶⁾,

microbiological techniques are useful to determine the best conduct to take in a case of acute pharyngotonsillitis⁽⁵⁾. As already known, the treatment with antibiotics aims to prevent acute rheumatic fever and suppurative complications, such as peritonsillar abscess and cervical lymphadenitis, besides reducing the duration of disease and the period of transmission to people close to the patient⁽⁴⁾. Conversely, the inappropriate treatment of acute pharyngotonsillitis with antibiotics is one of the contributing factors for the increase in the incidence of antimicrobial resistance^(7,8).

The study by Cardoso *et al*⁽⁵⁾ is being published at the moment when the Infectious Diseases Society of America has just issued an update of its conduct guidelines for the diagnosis and treatment of group A streptococcal pharyngitis, reinforcing the use of rapid test and/or of culture of oropharyngeal secretion for an accurate etiologic diagnosis of streptococcal pharyngotonsillitis⁽⁹⁾.

When commenting the current indiscriminate use of antibiotics, Gonzáles *et al*⁽¹⁰⁾ suggest that this is the result of a failure in putting evidence into practice. In the case of streptococcal pharyngotonsillitis, evidence from both outside Brazil and in our setting^(5,6) seems to indicate the need of using microbiological tests to achieve a more precise diagnosis.

Professora Livre Docente do Departamento de Pediatria; Chefe do Laboratório de Pesquisas da Disciplina de Infectologia Pediátrica da Escola Paulista de Medicina da Universidade Federal de São Paulo (UNIFESP), São Paulo, SP, Brasil

Endereço para correspondência:
Maria Isabel de M. Pinto
Laboratório de Pesquisas, Disciplina de Infectologia Pediátrica
Rua Pedro de Toledo, 781, 9º andar
CEP 04039-032 – São Paulo/SP
E-mail: m.isabelmp@uol.com.br

Conflito de interesse: nada a declarar

Recebido em: 19/11/2012

References

1. Bisno AL. Acute pharyngitis: etiology and diagnosis. *Pediatrics* 1996;97:949-54.
2. Ebell MH, Smith MA, Barry HC, Ives K, Carey M. The rational clinical examination. Does this patient have strep throat? *JAMA* 2000;284:2912-8.
3. Nascimento-Carvalho CM, Marques HH. Recomendação do departamento de Infectologia da Sociedade Brasileira de Pediatria para conduta de crianças e adolescentes com faringoamigdalites agudas. *J Pediatr (Rio J)* 2006;82:79-80.
4. American Academy of Pediatrics. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, editors. Group A streptococcal infections. Red Book: 2012. Report of the Committee on Infectious Diseases. 29th ed. Elk Grove Village: American Academy of Pediatrics; 2012. p. 668-80.
5. Cardoso DM, Gilio AE, Hsin SH, Machado BM, De Paulis M, Lotufo JP et al. Impacto do uso da prova rápida para estreptococo beta hemolítico do grupo A no diagnóstico e tratamento da faringotonsilite aguda em Pronto Socorro de Pediatria. *Rev Paul Pediatr* 2013;31:4-9.
6. dos Santos AG, Berezin EN. Comparative analysis of clinical and laboratory methods for diagnosing streptococcal sore throat. *J Pediatr (Rio J)* 2005;81:23-8.
7. Grijalva CG, Nuorti JP, Griffin MR. Antibiotic prescription rates for acute respiratory tract infections in US ambulatory settings. *JAMA* 2009;302:758-66.
8. Butler CC, Simpson SA, Dunstan F, Rollnick S, Cohen D, Gillespie D *et al.* Effectiveness of multifaceted educational programme to reduce antibiotic dispensing in primary care: practice based randomized controlled trial. *BMJ* 2012; 344:d8173.
9. Shulman ST, Bisno AL, Clegg HW, Gerber MA, Kaplan EL, Lee G *et al.* Clinical practice guideline for the diagnosis and management of group a streptococcal pharyngitis: 2012 update by the infectious diseases society of america. *Clin Infect Dis* 2012;55:e86-e102.
10. Gonzales R, Ackerman S, Handley M. Can Implementation Science help to overcome challenges in translating judicious antibiotic use into practice? *Arch Intern Med* 2012;172:1471-3.